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ABSTRACT

The executive summaries for two portions of a national survey of the programs and outcomes of bilingual education teacher training programs are presented. The first summarizes the findings of site visits to 56 two- and four-year institutions to examine four aspects of the teacher training programs: curriculum, management, student characteristics and progress, and the institutional setting. Indicators of an institution's ability to produce sufficient well-qualified bilingual education teachers and to institutionalize and maintain the programs in the absence of Federal support are also discussed. The second summary presents the findings of a survey of graduates from bilingual teacher education programs and a study of the supply of and demand for bilingual education teachers nationwide. The graduate survey obtained data on the professional status of 809 teacher education graduates and 168 teacher trainer program graduates from one to three years after training. The objective was to determine the extent to which the programs were alleviating the shortage of qualified teachers. (MSE)

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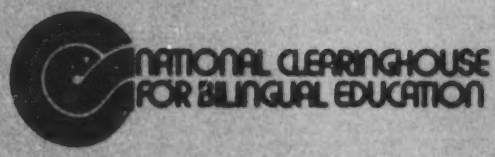

A Study of Teacher Training Programs in Bilingual Education

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Part C

Research Agenda

Bilingual Education Act
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A Study of Teacher Training Programs in Bilingual Education

Executive Summaries

Volumes I and II

Prepared for

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INTRODUCTION

In December 1978, the Office of Program Evaluation (OPE), U.S. Department of Education (ED), contracted with RMC Research Corporation to conduct a thirty-month study of bilingual education (BE) teacher training programs. The study was funded under the ED Title VII Part C Research Agenda. The major purposes of the study were to: (1) provide a comprehensive description of credential and degree-oriented training programs offered by institutions of higher education (IHEs); and (2) estimate the extent to which graduates of such programs contributed to the national supply of bilingual education teachers. The study focused on Title VII-funded programs although data from non-Title VII programs were included to provide comparisons and achieve greater comprehensiveness.

For the program description portion of the study, fifty-six two- and four-year IHEs were visited to collect information on four facets of program operations: curriculum, management, students, and setting. Volume I, Program Descriptions, of the full report (RMC Report UR-474ES) contains the results of this portion of the study as well as the description of the methods used (Binkley, Johnson, Stewart, Abrica-Carrasco, Nava, and Thrope, 1981).

For the second portion of the study, two activities were conducted: (1) a survey of graduates from IHE bilingual teacher training programs, and (2) a study of the supply of and need for BE teachers nationwide. The objective of the survey of graduates was to obtain data on the professional status of graduates from one to three years after training. For this purpose, each graduate was classified into one of two groups -- teacher graduates or trainer graduates -- depending on the focus of the IHE program. A sample of 809 teacher graduates were surveyed by mail, and a sample of 168 trainer graduates were surveyed by telephone.

The objective of the supply/need study was to assess the degree to which the current IHE teacher training programs were alleviating the shortage of qualified BE teachers. Data from the second portion of the study, The Supply of and Demand for Bilingual Education Teachers, is reported in Volume II (RMC Report UR-487ES) of the complete report (Binkley, Johnson, Kaskowitz, Horst, Gamel, and Stewart, 1981).

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Volume I
Executive Summary

Program Descriptions

DISCUSSION

The study's findings, in addition to providing information regarding a number of specific aspects of bilingual education programs, yielded suggestions relevant to the goals of the Department of Education in supporting such programs in IHEs. These goals can be broadly summarized as follows:

- To produce a sufficient number of graduates to satisfy the need for such personnel
- To produce graduates who are well qualified to teach in bilingual education programs or prepare others to do so
- To institutionalize the programs within their respective IHEs so that the programs will continue in the absence of federal support.

The goals are, of course, not mutually exclusive. The Title VII regulations address all of them either explicitly or implicitly. In making awards to IHEs, the Office of Bilingual Education and Minority Languages Affairs (OBEMLA) undoubtedly attempts to evaluate proposals on the basis of the IHEs' potential for meeting all three goals.

The findings of this study suggest that the potential of a particular IHE for reaching each of the goals may be determined on the basis of a set of indicators. Each of the goals and related indicators is discussed below. Since the goals are shared to some extent by the Department of Education and by IHEs themselves, the discussion includes consideration of what both OBEMLA and the IHEs might do to help achieve particular goals.

Producing More Graduates

Meeting the goal of more graduates is complex because the characteristics of the graduates must be matched to the nature of the demand for them. For example, which linguistic groups in the population are most in need of teachers? In which geographic areas are the teachers needed? At which professional levels are they needed?

Answers to these questions are difficult to obtain, especially in the context of changing public policies. Some work, however, has been done to identify the extent and nature of the demand for bilingual education personnel. For example, InterAmerica Research Associates, Inc. has prepared projections of non-English language background and limited-English-proficient persons in the United States which may be used in deriving estimates of the number of bilingual education teachers needed. Other studies, such as the Teachers' Language Skills Survey (NCES, 1977) and this study by RMC Research, have focused on various aspects of the supply of qualified bilingual education teachers. (A new Teacher's

Language Skills Survey is currently being conducted by InterAmerica Research Associates, and results should be available in 1984.) Volume II of this study draws on the above studies in addressing the issue of the extent to which the current supply of bilingual education teachers meets the estimated demand.

Aside from the significant impact of both Title VII- and non-Title VII-funded IHE programs, the demand for bilingual education teachers will continue to be strong and the Department of Education and the IHEs have an interest in meeting this demand. This study's findings suggest that certain factors (in addition to Title VII funding) tend to be associated with high levels of enrollees and graduates. OBEMLA may want to take into account these factors in determining Title VII budget allocations:

- IHEs in California, New York, and Texas tend to have higher mean enrollments per program than other IHEs.
- BE programs are larger in IHEs with large percentages of ethnolinguistic minority students.
- BE programs in states with BE certification requirements tend to have higher mean numbers of enrollees and graduates at the master's level.
- Programs in public IHEs tend to have much higher mean numbers of enrollees at the bachelor's and credential levels than do programs in private IHEs. At the master's level, programs in public IHEs typically have higher mean numbers of graduates.

In spite of a low correlation between levels of stipend funds and enrollees, it seems likely that increasing the amount of funds available for stipends and fellowships--either by budget reallocations or increases--would result in higher levels of enrollments at most IHEs. The degree to which a program is able to sustain itself within an IHE is very largely determined by the number of enrollees. If there are enough students to create a demand for the program, the IHE will generally find money to support program faculty.

Apart from actions OBEMLA might take, there are certain steps IHEs themselves could take to increase enrollment:

- Place more emphasis on student recruitment
- Make additional efforts to enhance articulation with community colleges and high schools.

Producing Well-Qualified Graduates

One issue in judging the extent to which a particular program is likely to graduate students who are well prepared is determining what evidence is to be used in making the judgment. Another issue is defining "well-qualified graduates."

There were two approaches to determine of whether or not

students possess specific qualifications. The first was to assess the subsequent performance of the graduates in their jobs. Such an assessment was far beyond the scope of this study. The other approach was to draw conclusions about the qualifications of graduates based on information about various program characteristics. While this approach required certain assumptions about the effects of these program characteristics on the skills of the students, it was the most feasible, given the limitations of this study. Program characteristics at two levels were used for making inferences about the qualifications of graduates. At the more general level, the researchers identified certain overall program features that appeared to affect the curriculum and, by implication, the qualifications of students. At a more specific level, the researchers described the knowledge, skills, and attitudes addressed in the required bilingual education curriculum.

Formulating a definition of a qualified bilingual education teacher was not one of the goals of this study. Therefore, in drawing conclusions about whether graduates are qualified, it is necessary to rely on existing definitions and professional opinions regarding what constitutes a qualified bilingual education teacher. Each state with BE certification requirements has arrived at a definition of a minimally qualified bilingual education teacher; the Title VII regulations include minimal qualifications that are less stringent than those of most states. (The regulations are described in detail in Volume I, pages VIII-13 and 14 of the full research report. Briefly, they require that teachers be proficient in English and the native language of students, and that they have successfully completed training in the use of classroom materials and instructional practices for bilingual education.) The researchers based the framework of competencies developed in this study on the judgment of bilingual educators about recommended skills for a bilingual education teacher. However, the framework was not intended to define a qualified BE teacher.

Graduates of BE programs located in states with BE certification obviously meet the state qualification standards. This study's findings also suggest that most teacher graduates of BE programs would not merely meet but exceed the Title VII criteria for qualified bilingual personnel. However, the findings regarding required BE course content and competencies addressed suggest that program improvements would be likely to enhance teacher qualifications. For example, those programs that have a broadly based required curriculum and provide exposure to several different faculty members appear to offer better preparation than those with heavy emphasis in one or two curricular areas taught by a small number of faculty members. OBEMLA could assess these program dimensions through the following measures:

- Require that IHE proposals describe <u>required</u> curricula rather than just relevant course offerings
- Strongly encourage participation of several faculty from relevant academic departments.

IHE programs that address more than one target language, while meeting the goal of producing graduates from different linguistic groups, often have difficulty in achieving the same level of preparation for all ethnolinguistic groups represented in the program. Unless there are enough students in each ethnolinguistic group to justify additional faculty and separate courses geared to each group, the program resources tend to be stretched too thin to satisfy the academic and linguistic needs of all students. This is a problem particularly for dual and multilanguage programs in small IHEs, where academic resources are even more limited. If there are demonstrated needs for programs that address more than one target language, perhaps some collaboration among IHEs in the same regions could help compensate for the curricular weaknesses that tend to be associated with multilanguage programs.

Program Institutionalization

Program institutionalization is a very important issue, since more than one-half of U.S. bilingual education graduates are from Title VII-funded programs. The researchers' observations suggest that certain factors tend to be associated with the institutionalization of a bilingual education program in an IHE:

- Active support from the administration
- Positive attitudes on the part of non-BE faculty
- Some portion of BE faculty supported by institutional funds
- Some portion of BE faculty on tenure track
- Involvement of several professionals in program operation
- Compatibility of the program with institutional priorities
- A sufficient number of students to sustain the program without Title VII support.

Program staffs in many IHEs were actively working toward achievement of these conditions. To the extent that OBEMLA is in a position to help IHEs achieve the goal of institutionalization, it should give more attention to these conditions in awarding grants. Many of the factors could be addressed in the regulations governing awards of training and fellowship funds. Of course, it is not a simple matter of funding or not funding a program on the basis of the presence or absence of the factors. For one thing, some of the indicators of institutionalization, e.g., attitudes of non-BE faculty or the number of professionals actively involved in the program, are difficult to assess, particularly in written documents such as proposals and reports. Beyond the difficulty of assessment, however, there are other complexities in making meaningful use of information on institutionalization status. First, a program needs funding for a period of time to develop these conditions; if funding ends too soon, an institutional base will probably never develop. Second, in some IHEs there will probably never be enough students to sustain a program without Title VII support, although the other indicators of institutionalization may be present; perhaps some level of continued Title VII support is justified, nevertheless. Finally, independent of the institutionalization status of particular programs, the demand for bilingual education teachers in a geographic area is an important consideration in funding decisions.

SUMMARY OF FINDINGS

This is a summary of the findings in the four categories which guided data collection and analysis: curriculum, management, students, and setting. Results refer to Title VII-funded programs, unless otherwise stated.

Curriculum[1]

- State BE certification standards played a major role in determining the content of BE programs. Many program personnel were influential in determining state BE certification standards.
- Of the seven graduate specialization areas explored in the study, administration was the one most commonly offered.
- In associate's, bachelor's, and doctoral programs, the number of required BE units composed about one-third of the entire program; in master's programs, the proportion was almost two-thirds.
- The vast majority of programs required some units of structured fieldwork experience; most fieldwork settings provided experience in a program target language.
- Courses in the areas of culture and general issues in BE were predominant in required curricula at all academic levels.
- Relatively little attention was given to the areas of school/community relations, classroom management, and classroom assessment in required BE curricula.
- Use of a program target language within courses and requirements for language courses both decreased as academic level increased.
- Use of a program target language within courses was greater in programs addressing only one target language than in programs addressing two or more target languages since, in the latter, classes consisted of students from different language groups.

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[1] Findings refer only to the required bilingual education content of program curricula. Generic teacher education curricula, although required of program students, were not investigated in this study.

- Non-Title VII programs had less emphasis on courses covering general issues in BE and linguistics and more emphasis on teaching content areas, teaching second language, school-community relations, and classrooom evaluation courses.

- Non-Spanish programs had less emphasis on courses in teaching language arts, teaching reading, research and program evaluation, and teacher training methodologies; they placed more emphasis on courses in classroom evaluation.

Management

- Program control and operation tended to be centralized among small numbers of people.

- Most programs drew BE faculty (faculty of required BE courses) from one or two departments, usually Education and Foreign Language. Three or four faculty members were responsible for teaching all the required BE courses in almost one-half of all programs.

- Bachelor's and credential programs spent almost one-half of their training funds on stipends or other student aid. The bulk of remaining funds were allocated toward support of BE program personnel.

- Over 80 percent of the BE faculty in Spanish programs were able to teach in the program's target language, compared with 60 percent of the faculty in programs addressing other languages.

- Of the BE faculty in the Department of Education, 75 percent were on tenure track; about one-half of these had tenure.

- About two-thirds of the BE faculty were supported entirely by institutional funds.

Students

- An estimated 1,394 students graduated from U.S. BE bachelor's and credential programs in 1979-1980; 66 percent of the graduates came from Title VII-funded programs.

- An estimated 1,018 students graduated from the U.S. BE master's programs in 1979-1980; 77 percent of the graduates came from Title VII-funded programs.

- An estimated 130 students graduated from Title VII-funded BE doctoral programs in 1979-1980. (Corresponding estimates for non-Title VII-funded

doctoral programs were not available, because at the time of sample selection, doctoral programs operating without Title VII funds were not identified.)

- The number of Title VII program graduates increased each year in the three-year period from 1977-1980.
- More than 85 percent of the graduates were prepared to serve in Spanish/English bilingual education programs.
- Levels of enrollment and numbers of graduates were higher in Title VII than in non-Title VII programs.
- Almost one-half of the Title VII-funded programs reported they could increase enrollment with current resources. Most of these programs were in states other than California, New York, and Texas. Given additional external funds, 85 percent of the Title VII programs would increase enrollment.
- More than one-half of the under-enrolled programs reported difficulty in recruiting students. Major problems in recruiting students were lack of student financial support and lack of personnel time for recruiting efforts.
- Of the students below the doctoral level, 68 percent were receiving Title VII stipends. Of the doctoral students, 80 percent were receiving Title VII fellowships.
- Non-Spanish programs had a higher mean percentage of enrollees receiving Title VII stipends than did Spanish programs.
- In Title VII-funded programs, 74 percent of the enrollees were native speakers of the target language; 86 percent were fluent in the target language.
- In the non-Title VII-funded programs, 50 percent of the enrollees were native speakers of the target language; 80 percent were fluent in the target language.
- Of the Title VII programs, 39 percent had language proficiency graduation requirements; 92 percent had some requirement or standard for proficiency in the program target language.

Setting

- BE programs in IHEs where there was an English as a second language (ESL) program had a higher percentage than other programs of required courses in methods of teaching a second language.

- The presence of an ESL program and its associated curricular influence on the BE program made the BE program(s) more politically acceptable to faculty and administrators.

- Several administrators and faculty reported that the BE program had had a positive effect on their attitudes toward multicultural and bilingual education, and on the education curriculum as a whole.

- More programs were judged likely to continue without external funding than not, albeit with decreased enrollments. (This judgment was based on the assumption that Title VII support for IHE programs would continue at about the same overall level.)

METHODOLOGY

Sampling

A total of fifty-six two- and four-year IHEs were visited for the purpose of gathering program information. The total sample included roughly 38 percent of the population of four-year IHEs receiving Title VII funds, and 50 percent of the two-year IHEs receiving such funds. A full description of the sampling methodology may be found on pages 1 through 6 of Volume I of the research report.

The following table provides a description of the site-visit sample.

	NUMBER OF IHEs		
Funding Source	4-Year	2-Year	Total
Title VII	38	5	43
Non-Title VII	13	0	13
Total	51	5	56

The large proportion of the Title VII population included in the sample and the generally close agreement between sample and population values on variables such as enrollment size, number of languages addressed, and program type (degree level) both suggest that the sample of Title VII-funded IHEs, at least, is reasonably representative.

The following provides a summary of the characteristics of the IHEs in the site-visit sample:

- In the sample, 66 percent of IHEs were in states with bilingual education certification requirements.
- Most IHEs visited were public institutions (86 percent of the Title VII-funded IHEs; 62 percent of the non-Title VII-funded IHEs).
- Across program types, in addition to ESL, 57 percent addressed only Spanish; 22 percent addressed Spanish and other language(s); and 21 percent addressed only non-Spanish language(s).

Data Collection, Processing, and Analysis

Three types of instruments were used to collect program description data: (1) structured interview guides for recording information produced from interviews with program administrators, directors, instructors, and other personnel; (2) a general program data inventory for information about the administrative location and unit requirements of the program; and (3) a summary site report form for aspects of the programs not covered in the above

instruments, such as unique or innovative program features, and subjective impressions of the site visitors. Preliminary versions of data collection instruments and procedures were reviewed with Advisory Panel members, pilot tested in IHEs, and revised.

Instruments were designed to collect information about the following program aspects: curriculum and instruction, management, students, and setting.

Before each visit, RMC site visitors studied the state BE certification requirements, funding proposals (from Title VII sites), and available program documents. These documents served as a preliminary orientation for the site visitors. Whenever possible, two staff members conducted each site visit. One or both site visitors had expertise in bilingual education and were proficient in one of the languages addressed by the program. Whenever possible, program directors, administrators, and faculty members were all interviewed. The faculty members interviewed were those who taught courses required of most or all BE students and that had content related to bilingual education. On-site data collection was usually completed within two days. Interviews not completed during the site visit were followed up by telephone.

Three procedures were used for processing data: computer processing; hand processing with the use of index cards; and hand processing using a framework of competencies developed in the study to classify the competencies addressed in required BE courses.

Typically, analyses were performed separately for groups differing on the following dimensions:

- Funding status: Title VII funded versus non-Title VII funded
- Language group addressed; programs addressing Spanish (either Spanish only or Spanish and one or more additional languages) versus those addressing only language(s) other than Spanish
- Certification status; presence or absence of state BE certification requirements.

A detailed description of data collection, processing, and analysis may be found in Volume I, pages 7 through 16 of the complete research report.

Volume II
Executive Summary

The Supply of and Demand for Bilingual Education Teachers

DISCUSSION

Degree to Which the Need for Newly Qualified BE Teachers is Currently Being Filled

Under what they considered to be plausible assumptions, the researchers estimated a need in public elementary schools for 24,300 qualified BE teachers and a maximum supply of 17,700 such teachers in fall 1980. This leaves a minimum requirement for 6,600 additional teachers to meet the need.

Assuming a 5 percent rate of attrition of teachers from the supply, the researchers found that it will take nearly nineteen years to fulfill the need for qualified BE teachers at the current rate at which newly qualified BE teachers graduate from IHE programs. However, projections of the number of students with limited English proficiency between the ages of five and fourteen (Oxford, Pol, Lopez, Stupp, Peng, and Gendell, 1980) indicate that the need for qualified teachers may increase dramatically over the next twenty years, because the number of LEP students is predicted to increase from 2.4 million in 1980 to 3.4 million in the year 2000. If these projections prove to be true, then the shortage of qualified BE teachers will be even more serious in the year 2000 than it is today, unless measures are taken to increase the supply.

One way to increase the supply of qualified BE teachers is to increase the federal funding of the IHE teacher training programs, both to aid current programs and to create new ones. Results from the RMC survey of IHEs, however, indicate that increases should be made selectively, because the enrollment in many existing programs is substantially less than capacity. Increasing enrollment capacity certainly is desirable both in the long term and immediately where a definite need is apparent. However, the primary short-term goal for the Office of Bilingual Education and Minority Languages Affairs (OBEMLA) should be to increase the enrollment in current programs by expanding recruitment activities. The short-term measures that can be taken by OBEMLA are described below in the areas of recruitment, training, placement, and retention.

Recruitment

- Increase the enrollment in current IHE training programs by (1) earmarking a portion of Title VII funds for recruitment, (2) increasing student stipends and aid, and (3) facilitating liaison between IHE program staff and high school students and staff.

- Develop a strategy for recruitment from the large group of over 100,000 teachers currently in the public schools who have partial qualifications for providing bilingual instruction.

Training

- Fund the development and implementation of training programs to facilitate the training of the partially qualified teachers currently in the public schools.

Placement

- Facilitate state, regional, and possibly national activities to aid in the placement of qualified BE teachers. The activities could include compiling directories of qualified teachers and available positions in BE programs and providing this information to teachers and school districts.

Retention

- Obtain estimates on the attrition rate for qualified BE teachers, and investigate their reasons for withdrawing from the BE teaching force.

SUMMARY OF RESULTS

The results are summarized under three headings: Supply of Qualified BE Teachers; Need for Qualified BE Teachers; and Rate at Which Newly Qualified Graduates Become Available.

Supply of Qualified BE Teachers

Estimates of the supply of qualified BE teachers as of fall 1980 varied from 10,600 to 36,200, depending on the assumptions made regarding (1) qualification requirements; (2) the number of newly qualified graduates from the IHE programs; and (3) the number of teachers who become qualified by means other than completion of an IHE program.

The greatest variation across estimates was due to differences in qualification criteria. Only 7,900 public school teachers would have been considered qualified in 1976-1977 under the most stringent set of criteria considered: language proficiency and training to teach language arts and other subjects to students whose language is other than English; post-secondary course work both in teaching English as a second language (ESL) and in history, culture, or ethnic studies associated with students whose language is other than English. On the other hand, 27,500 public school teachers would have been considered qualified in 1976-1977 under the least stringent set of criteria: language proficiency and training to teach either language arts or other subjects to students whose language is other than English.

Need for Qualified BE Teachers

Estimates of the number of qualified BE teachers needed varied tremendously depending on assumptions about the mix of program options and service delivery configurations that should be used to serve the population of students with limited English proficiency (LEP). For example, if all public school LEP students in grades K-12 were to be served in BE programs, then more than 112,000 qualified BE teachers would be needed. On the other hand, for BE programs provided only in the elementary grade levels to the students with the greatest need and in reasonable concentration, 24,300 qualified BE teachers would be needed.

Rate at Which Newly Qualified Graduates Become Available

The results of the IHE survey in the first portion of the present study indicate that Title VII programs are increasing their output of graduates at a much greater rate than are the unfunded programs. The number of graduates from Title VII bachelor's, credential, and master's programs was estimated to

have increased by 25 percent between 1977-1978 and 1979-1980, from a total of 1,346 graduates in 1977-1978 to 1,676 graduates in 1979-1980. This contrasts with an 8 percent increase in the number of graduates of non-Title VII IHE programs. The upper estimates of the total number of graduates in 1979-1980 was 1,800 students from bachelor's and credential programs and 1,300 students from master's programs.

According to the RMC graduate survey, a substantial percentage of graduates find positions in bilingual education or in fields related to the education of students with limited proficiency in English. An estimated 80 percent of the teacher graduates and 86 percent of the trainer graduates were employed in one of these fields.

The demand for qualified BE teachers is also apparent from the results of the RMC survey. An estimated 82 percent of the BE teacher graduates reported that they were employed in a teaching position. This contrasts with other studies (Metz and Crane, 1980; Graybeal, 1981) which have reported that only about 55 percent of the general population of graduates newly qualified to teach had obtained teaching positions one year after graduation.

From the RMC survey of graduates, an estimated 74 percent of the graduates from the BE bachelor's and credential programs and 45 percent of the graduates from the BE master's programs could be considered to be in the category of teachers who were newly qualified and available and willing to provide bilingual instruction. The remaining graduates either had been qualified BE teachers prior to entry into the training programs or were not available or willing to provide bilingual instruction after graduation. Therefore, as of 1979-1980, an upper estimate of 1,900 graduates of IHE programs become newly qualified and enter the supply of BE teachers each year. Of these, about 85 percent or 1,600 have been trained to teach at the elementary school level and 15 percent or 300 at the intermediate and secondary levels.

REFERENCES

Binkley, J.L.; Johnson, D.M.; Stewart, B.L.; Abrica-Carrasco, R.; Nava, H.G.; and Thrope, B. A Study of Teacher Training Programs in Bilingual Education, Volume I: Program Descriptions. Mountain View, Calif.: RMC Research Corporation, 1981 (RMC Report No. UR-474).

Graybeal, W.S. Teacher Supply and Demand in Public Schools, 1980-81. NEA Research Memo. Washington, D.C.: National Education Association, 1981.

Metz, A.S., and Crane, J.L. New Teachers in the Job Market. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1980.

Oxford, R.; Pol, L.; Lopez, D.; Stupp, P.; Peng, S.; and Gendell, M. Projections of Non-English Language Background and Limited English Proficient Persons in the United States to the Year 2000 (5 vols). Rosslyn, Va.: InterAmerica Research Associates, Inc., 1980.